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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,964	09/12/2003	Vijay V. Sarashetti	200600636-1	1087
22879 7590 10/06/2009 HEWLETT-PACKARD COMPANY Intellectual Property Administration 3404 E. Harmony Road Mail Stop 35 FORT COLLINS, CO 80528				
EXAMINER				
VO, TRUONG V				
ART UNIT		PAPER NUMBER		
2156				
NOTIFICATION DATE		DELIVERY MODE		
10/06/2009		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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**Office Action Summary****Application No.**

10/662,964

**Applicant(s)**

SARASHETTI, VIJAY V.

**Examiner**

TRUONG V. VO

**Art Unit**

2156

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 July 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09/12/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

**DETAILED ACTION**

1. In view of the appeal brief filed on 09 July 2009, PROSECUTION IS HEREBY REOPENED.

To avoid abandonment of the application, Appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

***Response to Arguments***

2. Applicant's arguments with respect to claims 1-38 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cha et al. (US 2003/0033328 A1) in view of Pragelas (US 2002/0095308 A1).

5. **Regarding claim 1**, Cha discloses entering the unique identifier in a hierarchical tree structure stored in a computer readable storage medium at the record collection site, wherein the unique identifier comprises information for accessing the record in the memory location, and wherein the tree structure comprises a plurality of branches connected by nodes (i.e., see FIG. 1-FIG. 7 and FIG. 5 shows the structure of a B+-tree index node used by the OLFIT scheme of the present invention. Stored in each index node are node content information and concurrency control information. The node contents include keys and pointers to other nodes 305 for accessing the database. The concurrency control information includes a latch 301 for governing concurrent access to a node and a version number 302 for indicating the updated status of the node contents. The node contents further include a level 303 specifying the level number of the node in the tree index, a size 304 for specifying the number the number of entries in the node, a high key 306 and a link pointer 307; [0041]).

Cha discloses sending the hierarchical tree structure to a central storage site (i.e., see FIG. 1-FIG. 4).

However, Cha does not explicitly disclose receiving an order for a transaction at a record collection site.

Meanwhile, Pragas discloses the central server 100 generates a unique order number or transaction number for this transaction which may be used by any of the parties to track the transaction; [0042]). This is similar to Cha teaching because of storing the record at the record collection site and assigning a version number to the record stored at the record collection site; [see FIG. 1-FIG. 8].

Furthermore, Pragas teaches a computer implemented method for representing records, the method comprising: receiving an order for a transaction at a record collection site (i.e., the method of the invention comprises electronically generating a bill of lading, such that the bill of lading can be accessed by the parties to the transaction; electronically notifying a storage facility of a sending party's instruction that an outgoing load be released from the facility for delivery; electronically notifying a carrier that the load is available for pickup; collecting information about the order throughout the course of the transaction; [0025]).

Pragas teaches producing a record that represents the transaction at the record collection site (i.e., the carrier 400 may communicate the identity of the vehicle 450 assigned to the transaction to the central server 100, which adds this information to a transaction record in the transaction information 108 portion of the databases 102. The other parties to the transaction may be notified of this information or, alternatively, view this information at any time by accessing the central server 100; [0047]).

Pragelas teaches storing the record in a memory location in a computer readable storage medium at the record collection site; assigning a unique identifier to the record stored at the record collection site (i.e., the central server 100 generates a unique order number or transaction number for this transaction which may be used by any of the parties to track the transaction, and creates a database entry in the transaction information 108 portion of the databases 102. This database entry is a centrally located collection of information regarding the transaction; [0042]).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made, having the teachings of Cha and Pragelas before him/her, to modify the method of Cha with the teaching of Pragelas to improved tracking of shipping records. The motivation to combine is apparent in Cha's reference, because of an index structure for managing a database system; (see Cha, [Abstract]). Therefore, it would be advantageous to have an improved process for avoiding unnecessary database activity; (see Pragelas; [0042]).

6. **Regarding claim 2**, most of the limitations of this claim have been met in the rejection of claim 1 above. Cha further discloses using the unique identifier to produce an aggregate report of records collected by the record collection site (i.e., see FIG. 1, c1-c4).

7. **Regarding claim 3**, Cha discloses using the unique identifier at the central storage site to access the record stored at the record collection site (i.e., see FIG. 1-FIG. 4).
8. **Regarding claim 4**, Cha discloses wherein the unique identifier includes information representing a node located in the hierarchical tree structure (i.e., see FIG. 5 and FIG. 7).
9. **Regarding claim 5**, Cha discloses wherein the node is located in a higher position of the hierarchical tree structure than the unique identifier (i.e., the node contents include keys and pointers to other nodes 305 for accessing the database. The concurrency control information includes a latch 301 for governing concurrent access to a node and a version number 302 for indicating the updated status of the node contents. The node contents further include a level 303 specifying the level number of the node in the tree index, a size 304 for specifying the number the number of entries in the node, a high key 306 and a link pointer 307; [0041]).
10. **Regarding claim 6**, Cha discloses wherein using the unique identifier to produce the aggregate report includes counting the unique identifier with a second unique identifier assigned to a second record stored at the record collection site (i.e., see FIG. 1-FIG. 4).

11. **Regarding claim 7**, Cha discloses wherein using the unique identifier to produce an aggregate report includes summing data included in the record accessed by the unique identifier with data included in a second record accessed by a second unique identifier (i.e., see FIG. 1).

12. **Regarding claim 8**, Cha discloses wherein a unique key that includes information representing a second node in the hierarchical tree structure is assigned to the node (i.e., see FIG. 8).

13. **Regarding claim 9**, is essentially the same as claim 1 except that it sets forth the claimed invention as a computer program product rather than a method and rejected for the same reasons as applied hereinabove.

14. **Regarding claim 10**, is essentially the same as claim 2 except that it sets forth the claimed invention as a computer program product rather than a method and rejected for the same reasons as applied hereinabove.

15. **Regarding claim 11**, is essentially the same as claim 3 except that it sets forth the claimed invention as a computer program product rather than a method and rejected for the same reasons as applied hereinabove.



16. **Regarding claim 12**, is essentially the same as claim 4 except that it sets forth the claimed invention as a computer program product rather than a method and rejected for the same reasons as applied hereinabove.

17. **Regarding claim 13**, is essentially the same as claim 5 except that it sets forth the claimed invention as a computer program product rather than a method and rejected for the same reasons as applied hereinabove.

18. **Regarding claim 14**, is essentially the same as claim 6 except that it sets forth the claimed invention as a computer program product rather than a method and rejected for the same reasons as applied hereinabove.

19. **Regarding claim 15**, is essentially the same as claim 7 except that it sets forth the claimed invention as a computer program product rather than a method and rejected for the same reasons as applied hereinabove.

20. **Regarding claim 16**, is essentially the same as claim 8 except that it sets forth the claimed invention as a computer program product rather than a method and rejected for the same reasons as applied hereinabove.

21. **Regarding claim 17**, is essentially the same as claim 1 except that it sets forth the claimed invention as a receiving method rather than a sending method and rejected for the same reasons as applied hereinabove.

22. **Regarding claim 18**, is essentially the same as claim 3 except that it sets forth the claimed invention as a receiving method rather than a sending method and rejected for the same reasons as applied hereinabove.

23. **Regarding claim 19**, is essentially the same as claims 2 and 3 except that it sets forth the claimed invention as a receiving method rather than a sending method and rejected for the same reasons as applied hereinabove.

24. **Regarding claim 20**, is essentially the same as claim 4 except that it sets forth the claimed invention as a receiving method rather than a sending method and rejected for the same reasons as applied hereinabove.

25. **Regarding claim 21**, is essentially the same as claim 1 except that it sets forth the claimed invention as a using method rather than a sending method and rejected for the same reasons as applied hereinabove.

26. **Regarding claim 22**, is essentially the same as claim 2 except that it sets forth the claimed invention as a using method rather than a sending method and rejected for the same reasons as applied hereinabove.

27. **Regarding claim 23**, is essentially the same as claim 4 except that it sets forth the claimed invention as a using method rather than a sending method and rejected for the same reasons as applied hereinabove.

28. **Regarding claim 24**, is essentially the same as claim 1 except that it sets forth the claimed invention as a system rather than a method and rejected for the same reasons as applied hereinabove.

29. **Regarding claim 25**, is essentially the same as claim 2 except that it sets forth the claimed invention as a system rather than a method and rejected for the same reasons as applied hereinabove.

30. **Regarding claim 26**, is essentially the same as claim 3 except that it sets forth the claimed invention as a system rather than a method and rejected for the same reasons as applied hereinabove.

31. **Regarding claim 27**, Cha discloses wherein assigning a unique identifier to a record stored at a record collection site comprises: producing a record at the record collection site (i.e., see FIG. 1-FIG. 4).

Cha discloses producing a unique identifier for the record to allow the record to be identified, distinguished and accessed from the record collection site (i.e., see FIG. 5).

Cha discloses assigning a unique identifier to the record so that the record is distinguishable from other records produced at the record collection site (i.e., see FIG. 5 and FIG. 8).

Cha discloses entering the unique identifier assigned to the record into a tree structure which is also stored at the record collection site (i.e., see FIG. 1-FIG. 4).

32. **Regarding claim 28**, most of the limitations of this claim have been met in the rejection of claim 27 above. Cha further discloses tree structure identifiers are assigned to similar record types and are grouped together thereby improving accessibility for the stored records (i.e., see FIG. 1-FIG. 4).

33. **Regarding claim 29**, most of the limitations of this claim have been met in the rejection of claim 28 above. Cha further discloses the tree structure is produced with a database software package capable of storing data in a balanced tree structure (i.e., an optimistic, latch-free index traversal ("OLFIT") concurrency control scheme is disclosed for an index structure for managing a database system. In each node of an index tree,

the OLFIT scheme maintains a latch, a version number, and a link to the next node at the same level of the index tree; [Abstract]).

34. **Regarding claim 30**, is essentially the same as claim 27 except that it sets forth the claimed invention as a computer program product rather than a method and rejected for the same reasons as applied hereinabove.

35. **Regarding claim 31**, is essentially the same as claim 28 except that it sets forth the claimed invention as a computer program product rather than a method and rejected for the same reasons as applied hereinabove.

36. **Regarding claim 32**, is essentially the same as claim 29 except that it sets forth the claimed invention as a computer program product rather than a method and rejected for the same reasons as applied hereinabove.

37. **Regarding claim 33**, is essentially the same as claim 27 and rejected for the same reasons as applied hereinabove.

38. **Regarding claim 34**, is essentially the same as claim 28 and rejected for the same reasons as applied hereinabove.

39. **Regarding claim 35**, is essentially the same as claim 29 and rejected for the same reasons as applied hereinabove.

40. **Regarding claim 36**, is essentially the same as claim 27 except that it sets forth the claimed invention as a system rather than a method and rejected for the same reasons as applied hereinabove.

41. **Regarding claim 37**, is essentially the same as claim 28 except that it sets forth the claimed invention as a system rather than a method and rejected for the same reasons as applied hereinabove.

42. **Regarding claim 38**, is essentially the same as claim 29 except that it sets forth the claimed invention as a system rather than a method and rejected for the same reasons as applied hereinabove.

### ***Conclusion***

43. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Truong V. Vo whose telephone number is (571) 272-1796. The examiner can normally be reached on Mon.-Thr. 7:30a.m.-5p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pierre Vital can be reached on (571) 272-4215. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

September 30, 2009

Truong Van Vo

/Truong V Vo/  
Examiner, Art Unit 2156

/Pierre M. Vital/  
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